STATE OF MARYLAND

DHMH

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May 4, 2012

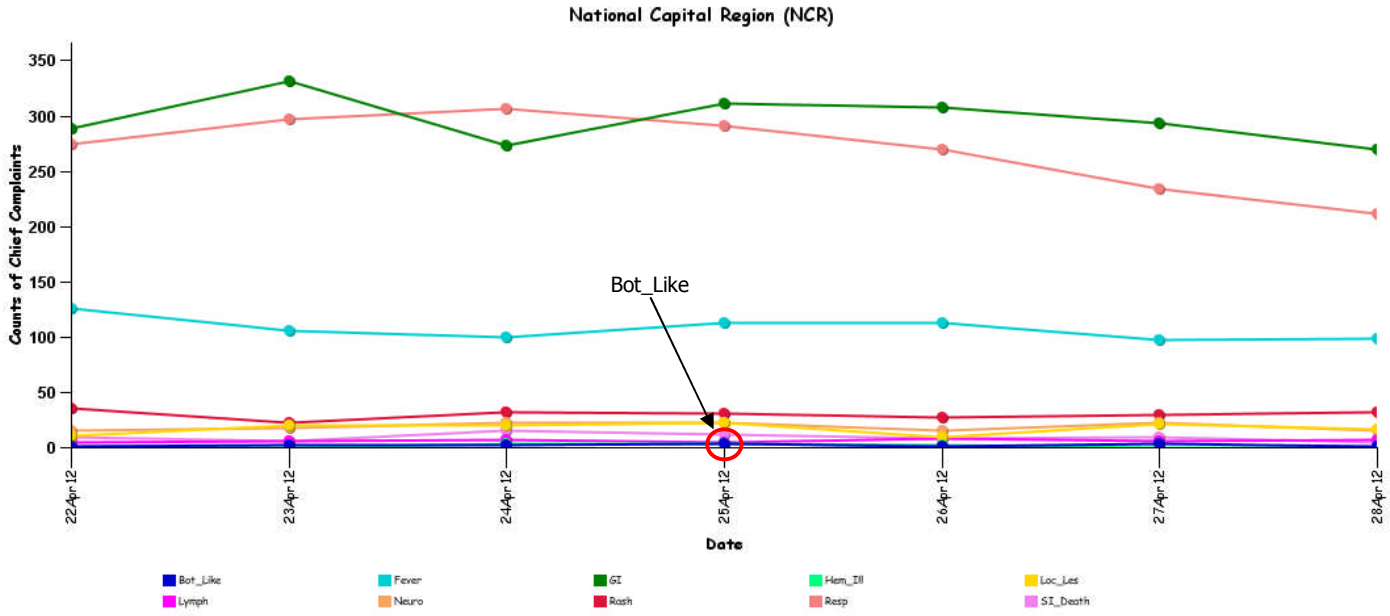
Public Health & Emergency Preparedness Bulletin: # 2012:17
Reporting for the week ending 04/28/12 (MMWR Week #17)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

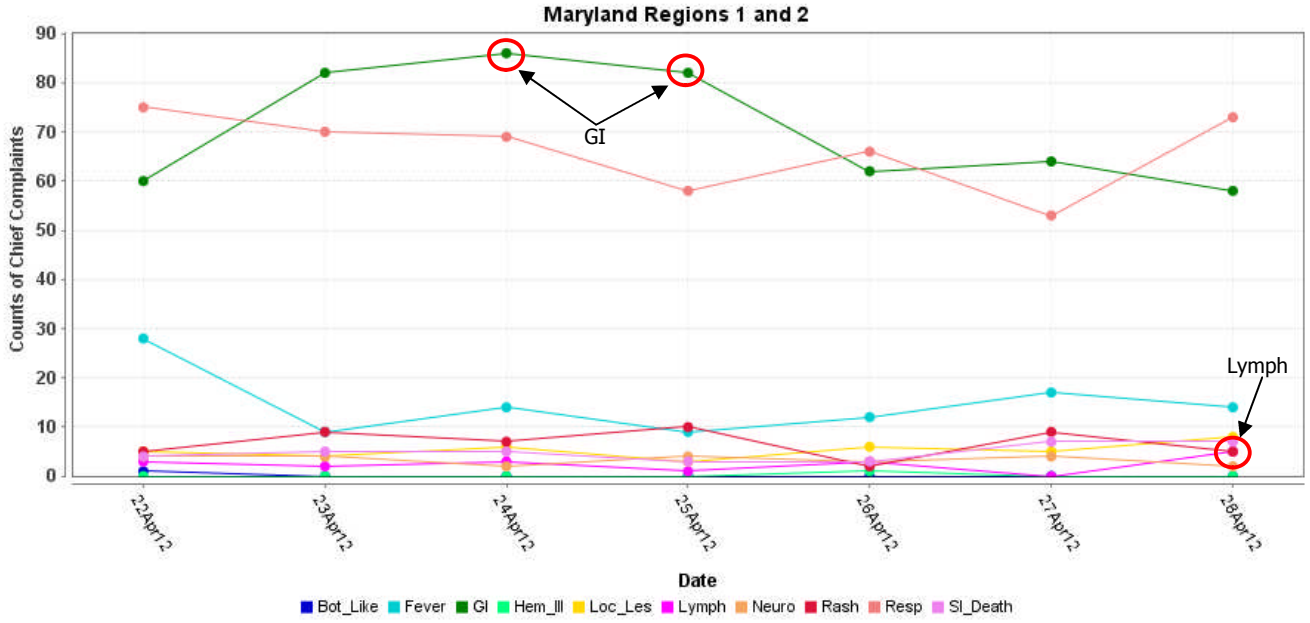
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

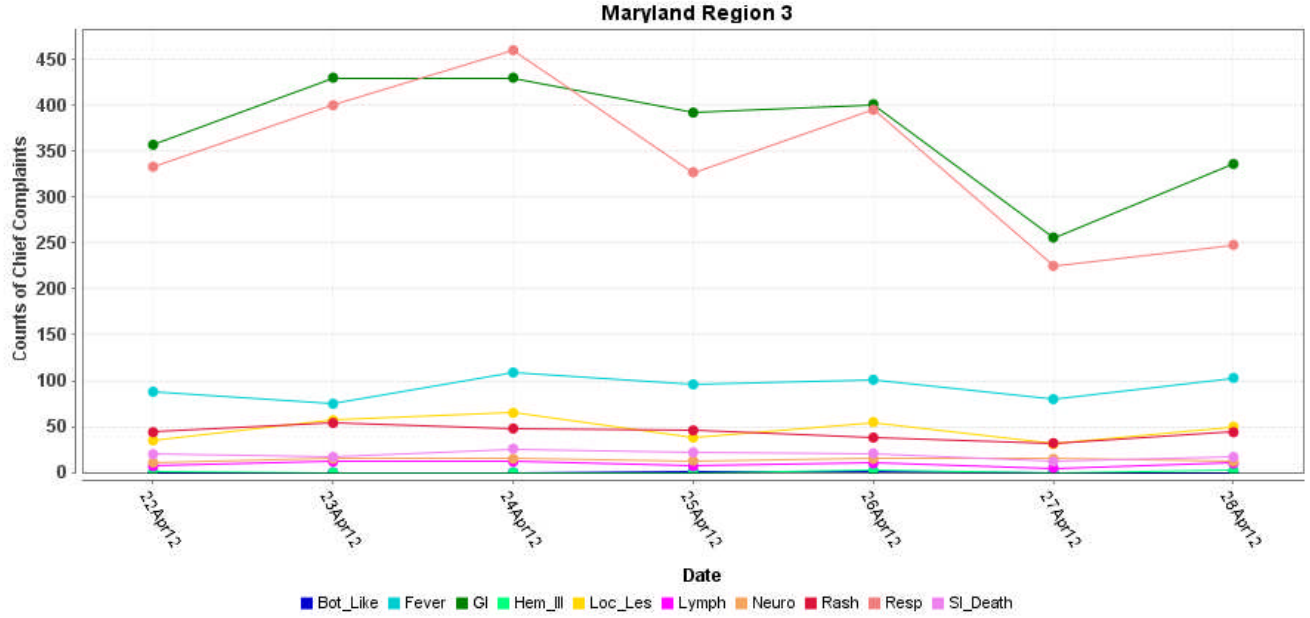


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

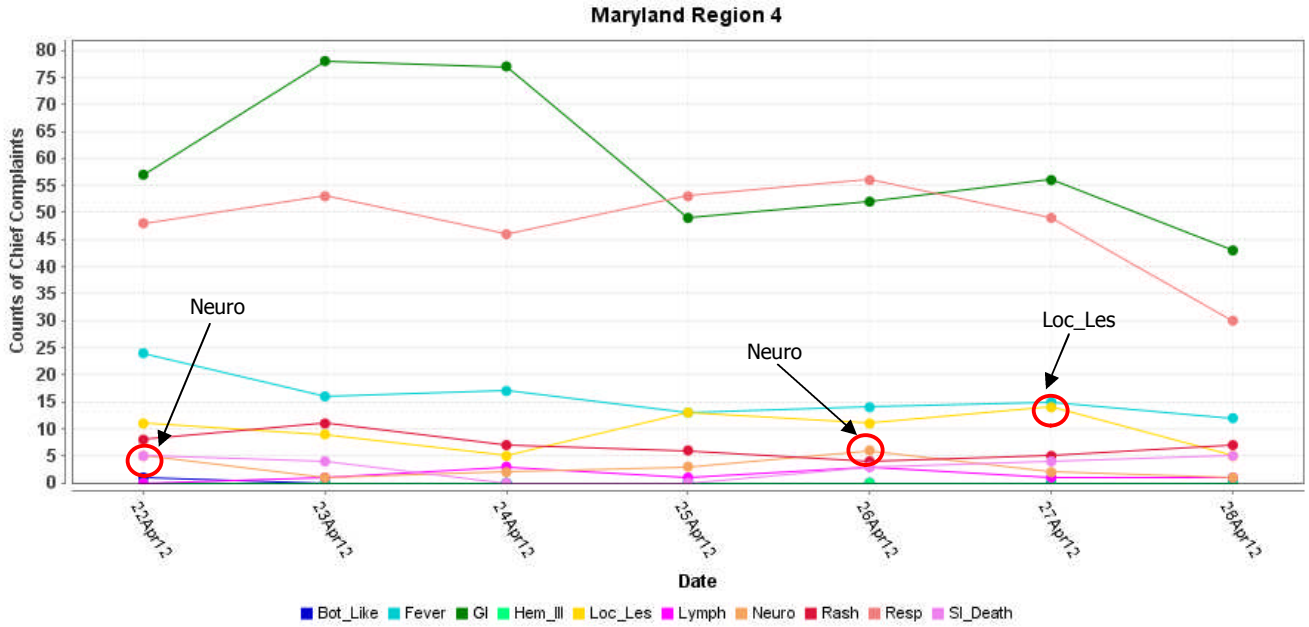
MARYLAND ESSENCE:



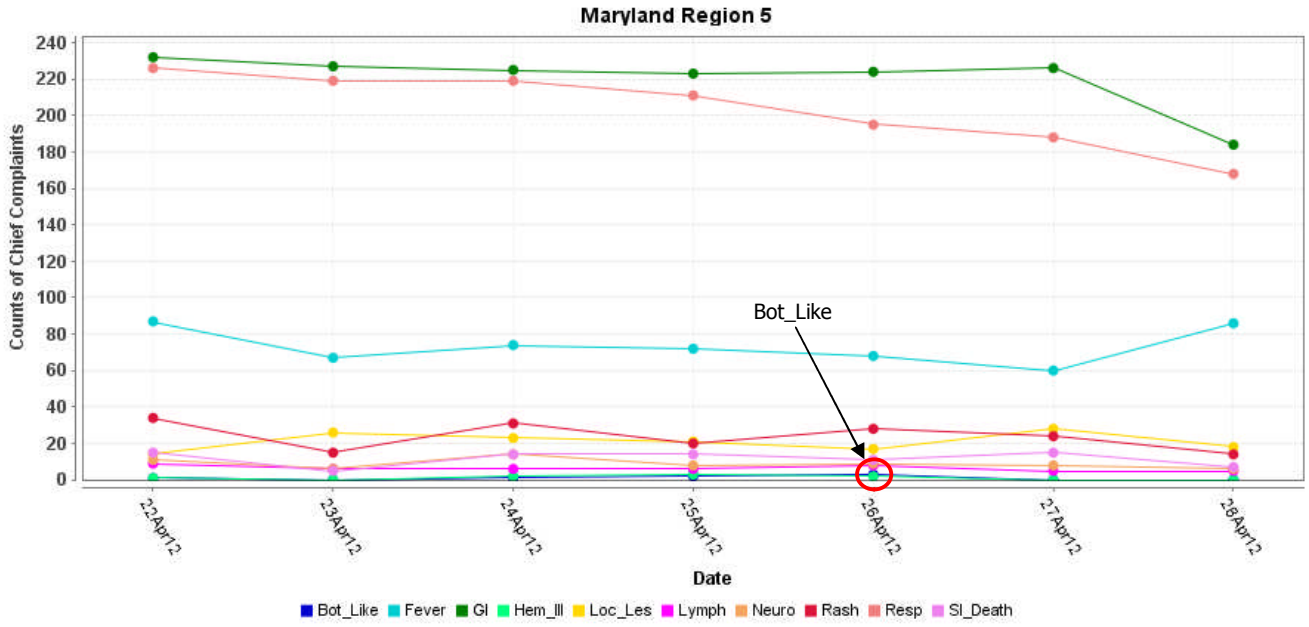
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



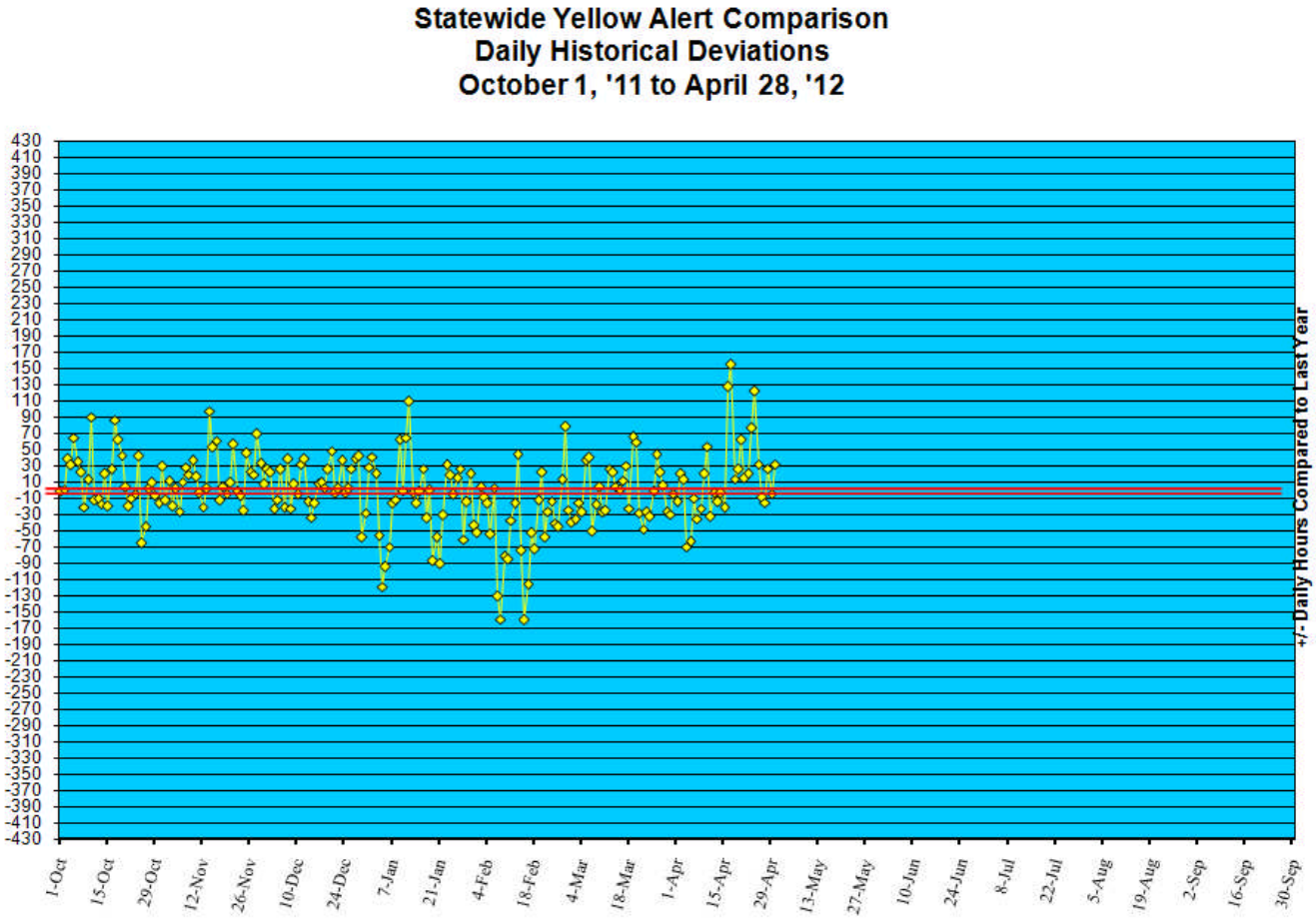
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (April 22 – April 28, 2012):	9	0
Prior week (April 15 – April 21, 2012):	9	0
Week#17, 2011 (April 23 – April 29, 2011):	2	0

3 outbreaks were reported to DHMH during MMWR Week 17 (April 22-28, 2012)

2 Foodborne outbreaks
1 outbreak of GASTROENTERITIS/FOODBORNE associated with Private Homes
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Workplace

1 Respiratory illness outbreak
1 outbreak of PNEUMONIA in a Nursing Home

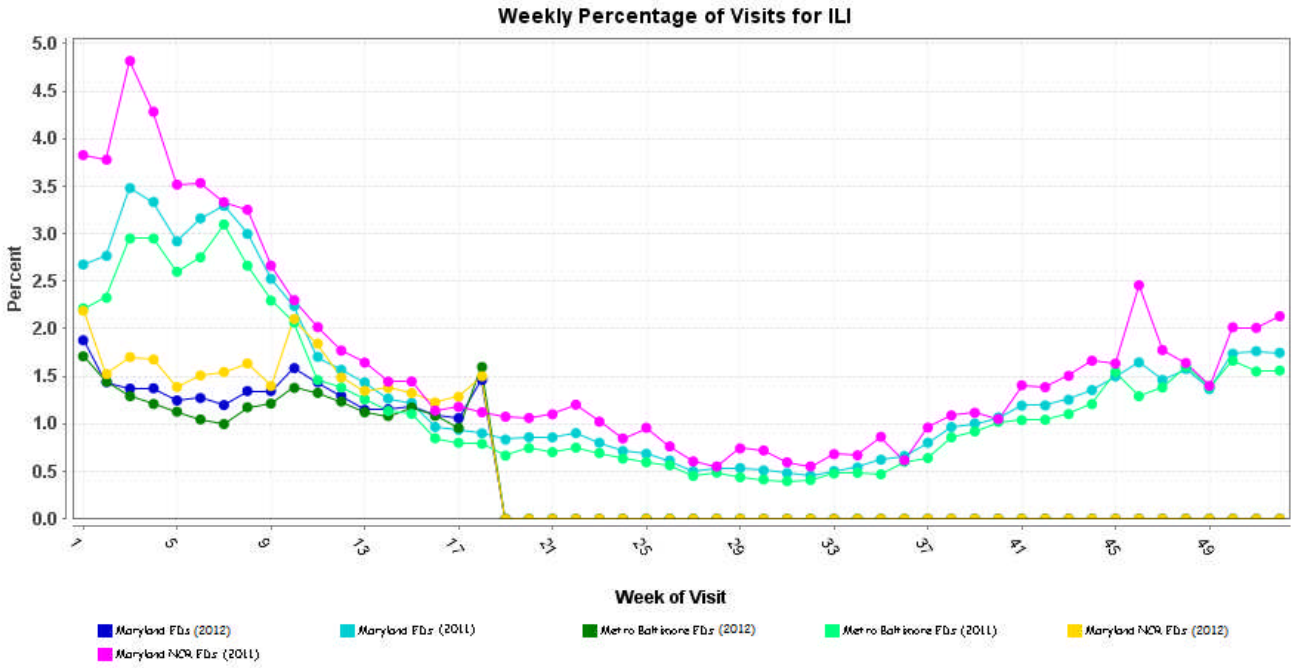
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 17 was: Sporadic Activity, Minimal Intensity.

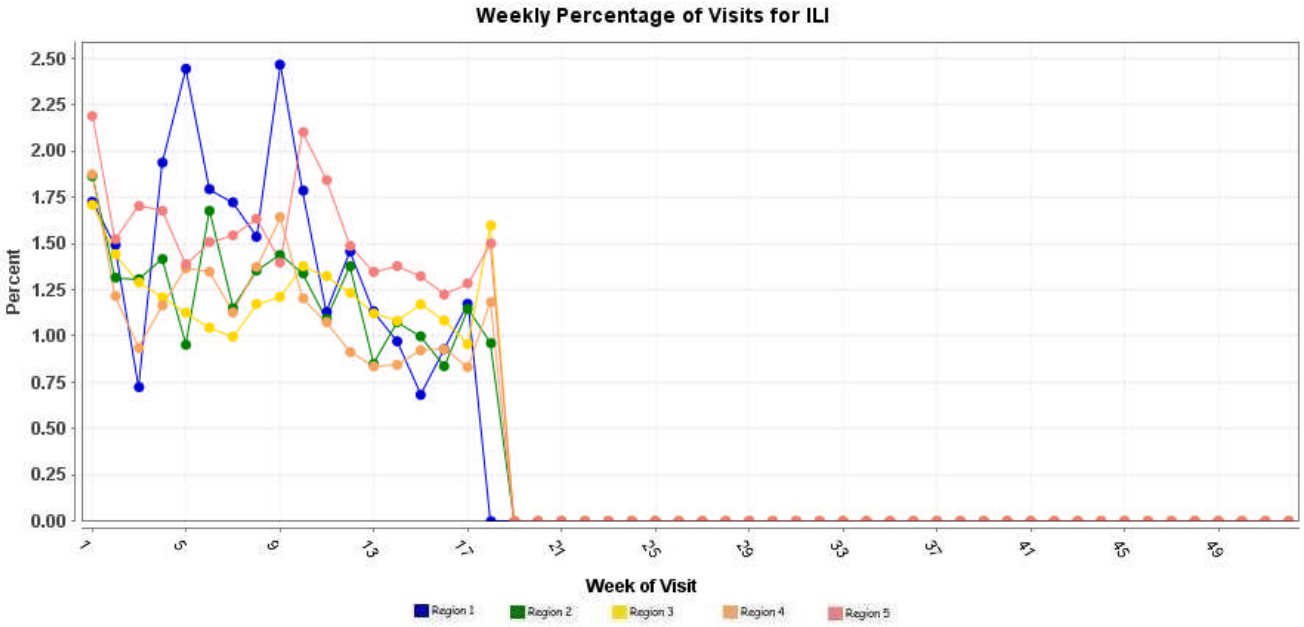
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



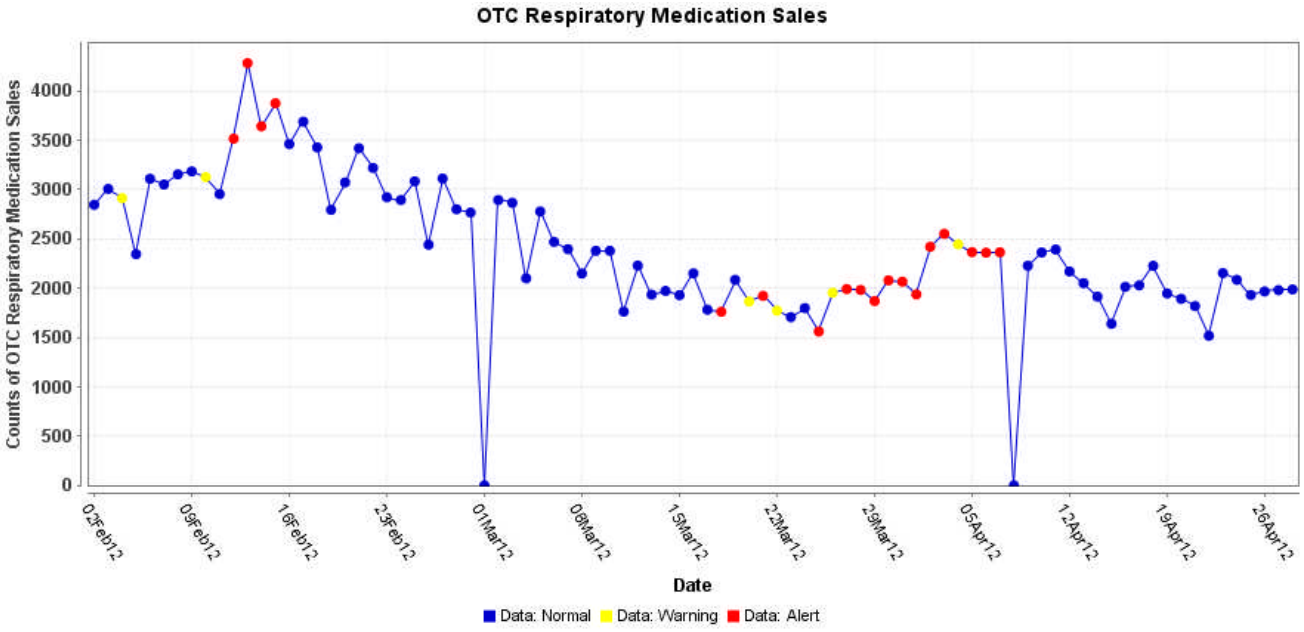
* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of April 12, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 602, of which 355 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (TAIWAN): 22 April 2012, The Centers for Disease Control (CDC) confirmed on Sunday [22 Apr 2012] that 3 poultry workers and officials working in animal quarantine have tested positive for antibodies for the H5N2 strain of avian influenza. However, all 3 people are healthy and none has developed any flu symptoms, CDC deputy director general Chou Jih-haw said, adding that there is no public health risk of human-to-human transmission. Chou noted that they might be in contact with the H5N2 strain of the virus but he said the antibodies could also be a result of cross-reactivity because all 3 received flu vaccinations last year [2011] and all had received H5N1 vaccination in March or April [2012]. Taiwan confirmed the 1st outbreak of highly pathogenic H5N2 avian influenza on 3 Mar 2012 after chicken farms in Changhua and Nantou counties, as well as in Tainan, reported avian flu outbreaks. Over 75 000 chickens have been culled as a result of the outbreaks.

AVIAN INFLUENZA, HUMAN (INDONESIA): 25 April 2012, An 8 year old boy died from bird flu [avian influenza A/(H5N1) virus infection] in a Bali hospital on Tuesday night [24 Apr 2012]. The boy was in critical condition when he was transferred from Bangli Hospital to Sanglah Hospital on Tuesday afternoon and he was immediately isolated. "Clinically, and supported by the VCR (visual convention reaction) laboratory result, the victim was positively infected with the H5N1 virus," said Sanglah Hospital spokesman Ida Bagus Ken Wirasandi on Wednesday [25 Apr 2012]. The boy died at 10:15 pm after 4 hours at the hospital. Ken said the boy's family told him the victim had been in contact with dead poultry 2 months ago. The Bali Health Agency head Ketut Suarjaya said that 7 people on Bali have died since the virus first reached the island in 2007. "In 2011, 46 patients were suspected to have avian flu [in Bali]," Suarjaya said.

NATIONAL DISEASE REPORTS

CLOSTRIDIUM PERFRINGENS (MICHIGAN): 25 April 2012, There's new information about an apparent case of food poisoning at the Kent County Jail. Hundreds of inmates became sick earlier in April 2012 with a gastritis-type illness. Tests revealed a bacterium found in the rice and cheese served to the inmates. *Clostridium perfringens* is the most common kind of bacterial food poisoning. It can make one ill in as little as 6 hours with diarrhea and stomach cramps. When large quantities of food that carry the bacterium, in this case rice and cheese, are stored at too warm a temperature for too long a time, problems may develop. That's why most of the outbreaks happen in institutions like jails, schools, nursing homes and places that need to keep food warm. If there is live bacteria on the food that didn't get killed during the cooking process, then a long period of warming is the perfect incubation for it. Once the live bacterium is ingested, a toxin is produced that makes one ill. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

BOTULISM (USA): 26 April 2012, A Los Angeles seafood company is voluntarily recalling its smoked and dry vobla fish because it may be contaminated with a bacteria that can cause botulism. LA Star Seafood Co. Inc. said in a release Wednesday, 25 Apr 2012, that it is recalling 20-pound bulk boxes of the salt-cured fish that is popular in many Russian households and beer restaurants. The boxes are not vacuum-packed, have no lot numbers, and no expiration dates. The company says the fish were improperly eviscerated, leaving them vulnerable to contain spores of the botulism bacterium. Customers who purchased the fish between 28 Feb 2012 and 23 Apr 2012 are urged to destroy or return the products. The products were distributed and sold in Utah, Oregon, Colorado, and California. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE BAREILLY (USA): 24 April 2012, Testing performed by the Department of Agriculture Trade and Consumer Protection (DATCP) laboratory has confirmed *Salmonella Bareilly* contamination in recalled yellowfin tuna and in a spicy tuna roll made with the recalled tuna. The Wisconsin State Laboratory of Hygiene (WSLH) at the University of Wisconsin-Madison found that the organism isolated from these samples matched the DNA fingerprint of the outbreak *S. Bareilly* strain isolated from ill individuals. These lab tests confirmed earlier evidence discovered through case interviews and product tracking that the yellowfin tuna was the source of the contamination. To date, the outbreak of *S. Bareilly* infections has involved 160 ill individuals in 20 states and the District of Columbia. Both of the contaminated samples were collected and tested as part of a collaborative effort in which Wisconsin state and local officials assisted federal investigators. On 13 Apr 2012, the Moon Marine USA Corporation (also known as MMI) of Cupertino, California voluntarily recalled all frozen raw yellowfin tuna product, labeled as Nakaochi Scrape AA or AAA. The product was not available for sale to individual consumers but may have been used to make sushi, sashimi, ceviche and similar dishes available in restaurants and grocery stores. The Food and Drug Administration is continuing to trace the recalled tuna forward from the recalling company through the subsequent distribution. Since February 2012, 15 Wisconsin residents have had laboratory-confirmed *S. Bareilly* infections that match the DNA fingerprints of the national outbreak strain. Three of the 15 patients were hospitalized, and all of the patients have recovered from their infection. County cases: Milwaukee 6; Washington 2; Waukesha 7. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

LEPTOSPIROSIS (PERU): 22 April 2012, Iquitos [Loreto Region] is suffering the ravages of the highest river water levels in the past 25 years and some predictable consequences, such as the current outbreak of leptospirosis, are already occurring. It is important to call attention to this issue because, while the population is concerned about dengue fever and authorities are focusing their efforts on fumigation, not enough attention is being paid [to the

outbreak of leptospirosis]. Doctors at the health posts and centers in the region of course continue to regard any fever with thrombocytopenia as probable dengue fever, which is not wrong, but this is delaying the suspicion of leptospirosis and severe cases are already arriving at health centers (if there is no alert, health care workers will not consider the diagnosis of leptospirosis in a timely fashion.) So far this year [2012], in the Loreto Regional Hospital [HRL] alone we have treated 5 patient of severe pulmonary leptospirosis (with pulmonary hemorrhage) who recovered in the intensive care unit [ICU]; a probable fatal case referred from a private clinic, awaiting confirmation of the diagnosis; and a current patient who is in critical condition in the ICU-HRL (22 Apr 2012). In addition, a man from Nauta with febrile icteric syndrome (confirmed by PCR [polymerase chain reaction]) died today [22 Apr 2012] with a diagnosis of severe leptospirosis and renal failure, and 2 young men with lung injury remain in hospital but they are in stable condition thanks to the timely suspicion and medical attention. According to information from infectious diseases colleagues there is a similar case in HAI [Iquitos Support Hospital] and a case from Yurimaguas with acute renal failure treated in Tarapoto, who recovered satisfactorily **.** (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey
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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable